

***Remarks***

Reconsideration of this Application is respectfully requested.

Upon entry of the foregoing amendment, claims 40-57 are pending in the application, with claim 40 being the sole independent claim. Claims 1-3 and 38-39 are sought to be canceled without prejudice to or disclaimer of the subject matter therein. Claims 40-57 are sought to be added. These changes are believed to introduce no new matter.

A request for continued examination (RCE) is being filed concurrently herewith. Therefore, the finality of the Office Action dated April 15, 2005, should be withdrawn and the amendments and remarks presented herein should be entered and considered. *See* 37 C.F.R. § 1.114(d).

Based on the above amendment and the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding rejections and that they be withdrawn.

***I. Support for New Claims***

Support for the new claims can be found throughout the specification. Support for new claims 40-44 can be found, *e.g.*, at page 22, paragraph 97, and at page 24, paragraphs 103-104. Support for new claim 45 can be found, *e.g.*, at page 33, paragraph 139. Support for new claims 46-48 can be found, *e.g.*, at page 23, paragraphs 99-101. Support for new claims 49-51 can be found, *e.g.*, at pages 24-25, paragraph 105. Support for new claims 52 and 53 can be found, *e.g.*, at page 25, paragraph 106. Support for new claims 54 and 55 can be found, *e.g.*, at page 25, paragraph 108. Support for new claims 56 and 57 can be found, *e.g.*, at page 24, paragraph 104, and at pages 42-43, paragraph 162.

## ***II. Claim Rejection Under 35 U.S.C. § 103***

Claims 1-3, 38 and 39 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Horsburgh *et al.*, U.S. Patent No. 6,277,621 ("Horsburgh") in view of Johnston *et al.*, *Hum. Gene Ther.* 8:359-370 (1997) ("Johnston"). See Office Action, page 4. Applicants respectfully traverse this rejection.

Applicants first note that claims 1-3, 38 and 39 have been canceled. New claims 40-57 are directed to methods for converting a large capacity cloning vector into a herpes simplex virus (HSV)-based amplicon. The methods comprise recombining: (a) a large capacity cloning vector comprising a genomic DNA insert; and (b) an amplicon vector comprising a herpesvirus cleavage/packaging sequence and a herpesvirus origin of replication. According to the currently presented claims, recombination of (a) and (b) produces an HSV-based amplicon vector comprising the genomic DNA insert. An embodiment of the currently claimed methods is demonstrated in Example 1 (pages 32-44, paragraphs 136-166), and is illustrated schematically in Figures 1A and 1B.

In order to establish a *prima facie* case of obviousness, all of the claim limitations must be taught or suggested by the cited art. See M.P.E.P. § 2143.03 (citing *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (CCPA 1974)). Not all of the limitations of the currently presented claims are taught or suggested by Horsburgh and Johnston.

For example, Horsburgh refers to "artificial chromosome constructs containing foreign nucleic acid sequences, such as viral nucleic acid sequences." See column 1, lines 50-52. The example in Horsburgh relates to the cloning of the entire HSV genome in a

bacterial artificial chromosome. *See* column 11, lines 18-19. Horsburgh, however, does not teach or suggest recombining: (a) a large capacity cloning vector *comprising a genomic DNA insert*; and (b) an *amplicon vector* comprising a herpesvirus cleavage/packaging sequence and a herpesvirus origin of replication. Although Horsburgh mentions the use of large capacity cloning vectors (*i.e.*, "artificial chromosomes"), there is no suggestion in Horsburgh that the large capacity cloning vectors comprise a genomic DNA insert or that they can be recombined with an amplicon vector. Furthermore, the only mention of amplicons in Horsburgh is in the context of their being packaged into recombinant virus particles by co-transfection with the "artificial chromosome constructs." *See* column 10, lines 33-47. Horsburgh in no way suggests *recombining* an amplicon with a large capacity cloning vector (and certainly does not teach or suggest recombining an amplicon with a large capacity cloning vector comprising a genomic DNA insert). Thus, Horsburgh fails to teach or suggest several elements of the currently claimed methods.

None of the elements of the currently claimed methods that are lacking in Horsburgh are taught or suggested by Johnston. For instance, Johnston -- like Horsburgh -- fails to teach or suggest a large capacity cloning vector comprising a genomic DNA insert. Johnston does not mention large capacity cloning vectors at all. It therefore follows that Johnston cannot teach or suggest recombining a large capacity cloning vector and an amplicon vector. Thus, the elements of the currently claimed methods that are lacking in Horsburgh are also lacking in Johnston.

Since not all elements of the currently claimed methods are taught or suggested by the cited references, a *prima facie* case of obviousness cannot be established. Applicants

respectfully request that the rejection under 35 U.S.C. § 103 be reconsidered and that it not be applied to any of the currently presented claims.

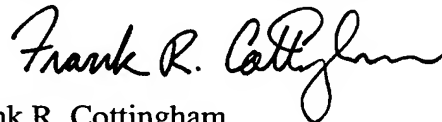
### ***Conclusion***

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

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